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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,585	04/11/2006	Michael Grass	DE 030351	9559
24737 7590 05/13/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
KAO, CHIH CHENG G				
ART UNIT		PAPER NUMBER		
2882				
MAIL DATE		DELIVERY MODE		
05/13/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/575,585

**Applicant(s)**

GRASS ET AL.

**Examiner**

Chih-Cheng Glen Kao

**Art Unit**

2882

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7, 8, 10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 10, 2009, has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 7-8, 10, and 12-13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for x-ray radiation, does not reasonably provide enablement for the broad scope of radiation, which includes other radiation such as radio waves or cosmic radiation. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

While the specification is enabling for x-ray radiation, the specification does not enable one to make the invention with other types of radiation, such as radio waves or cosmic radiation. Since the specification does not enable one to make the invention commensurate in scope with

these claims without undue experimentation, the claims have been rejected for enablement issues. See *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 84 U.S.P.Q.2d 1705 (Fed. Cir. 2007). This rejection may be obviated by inserting "x-ray" before each instance of "radiation" in the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7, 8, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazarev et al. (EP 1062914, herein after referred to as Lazarev).

3. Regarding claims 1 and 10, Lazarev discloses an apparatus and method comprising: a source of radiation (fig. 6, #1); and a single radiation detector array (fig. 8, #3; or fig. 5, #3 and 9; i.e., a single group (i.e., the single collective group of #3 and 8 for the system) of single radiation detector elements forming a complete unit for the system); wherein the source of radiation is adapted to generate a fan-shaped radiation beam (fig. 6, #8); wherein the single radiation detector array (fig. 6, #3) is asymmetrically arranged with respect to the fan-shaped radiation beam, wherein a first part of the single radiation detector array is used for a cone beam data acquisition (fig. 6, via #8) and a second part of the single radiation detector array is used for scatter radiation measurements (fig. 6, via #7), wherein the source of radiation (fig. 2, #1) and the single radiation detector array (fig. 2, #3) are rotatable around a rotational axis extending

through an examination area for receiving the object of interest (fig. 2, #4); wherein the source of radiation (fig. 2, #1) is arranged opposite to the single radiation detector array (fig. 2, #3) during scanning; wherein the source of radiation generates a fan-shaped x-ray beam (fig. 6, #8) adapted to penetrate the object of interest (fig. 6, #4) in the examination area in a slice plane; wherein the single radiation detector array (figs. 2 and 6, #3) includes a plurality of detector lines each with a plurality of detector elements arranged in a line; wherein the plurality of detector lines are arranged parallel to the slice plane (fig. 6, defined by #8); wherein a primary radiation (fig. 5, #8) attenuated by the object of interest (fig. 5, #4) impinges directly on a first line of the plurality of detector lines (fig. 5, of #5); wherein the first line is not a second line of the plurality of detector lines; wherein the second line (fig. 6, line of #3 close to the geometrical center) is extending close to the geometrical center of the single radiation detector array, and wherein the first line is the last line of the single radiation detector array (fig. 5, #9) in a direction along which the object of interest (fig. 2, #4) is displaced (col. 12, lines 15-17) with respect to the single radiation detector array.

4. Regarding claim 2, Lazarev further discloses wherein the single radiation detector array (fig. 6, #3) is arranged such that the slice plane intersects the single radiation detector array at a side thereof.

5. Regarding claim 3, Lazarev further discloses wherein the object of interest is displaced with respect to the slice plane along a scanning direction which intersects the slice plane at an angle (col. 12, lines 15-17); wherein a location where the slice plane intersects the single

radiation detector array is offset with respect to a geometrical center of the single radiation detector array (fig. 6, #3); and wherein the location is offset from the geometrical center in the scanning direction (big arrow in fig. 2).

6. Regarding claim 4, Lazarev further discloses wherein the single radiation detector array (fig. 6, #3) comprises a plurality of detector lines; and wherein the fan-shaped radiation beam has a width (fig. 6, #8) of at least two detector lines of the plurality of detector lines when the radiation beam impinges onto the single radiation detector array (fig. 6, #3) after transmission through the object of interest (fig. 6, #4).

7. Regarding claims 5 and 12, Lazarev further discloses wherein the fan-shaped radiation beam has a width (fig. 6, #8) of at least two detector lines of the plurality of detector lines when the radiation beam impinges onto the single radiation detector array (fig. 6, #3) after transmission through the object of interest (fig. 6, #4) and wherein only one first part of the single radiation detector array (fig. 6, #3) is used for a cone beam data acquisition (fig. 6, via #8) and only one second part of the single radiation detector array is used for scatter radiation measurements (fig. 6, via #7).

8. Regarding claim 7, Lazarev further discloses wherein the first line (fig. 6, defined by #8) is arranged at a distance from the geometrical center in the direction along which the object of interest (fig. 6, #4) is displaced (col. 12, lines 15-17) with respect to the single radiation detector array (fig. 6, #3) during scanning.

9. Regarding claim 8, Lazarev further discloses wherein a third line of the plurality of detector lines measures a scatter radiation (fig. 6, #7) scattered from the object of interest (fig. 6, #4); and wherein the third detector line is offset from the first detector line (fig. 6, defined by #8) in the direction along which the object of interest is displaced (col. 12, lines 15-17) with respect to the single radiation detector array (fig. 6, #3) during scanning.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarev in view of Li (US 6459755).

For purposes of being concise, Lazarev discloses an apparatus as recited above.

However, Lazarev does not specifically disclose a computer readable medium encoded with a computer program for operating the apparatus.

Li teaches a computer readable medium encoded with a computer program (fig. 2, in #36) for operating an apparatus.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the apparatus of Lazarev with the computer readable medium of

Li, since one would have been motivated to make such a modification for more easily executing a process via computer control.

***Response to Arguments***

11. Applicant's arguments filed April 10, 2009, have been fully considered but they are not persuasive.

Regarding at least claims 1, 10, and 13, in response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant appears to rely (i.e., only a single contiguous radiation detector array) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further argues the claim features of wherein the first line is the last line of the single radiation detector array in the direction along which the object of interest is displaced with respect to the single radiation detector array are not disclosed or suggested in Lazarev. The Examiner disagrees. The Examiner disagrees. As seen in figure 5 and as further exemplified in figure 2, the primary radiation beam 8 impinge on the last detector 9 (fig. 2, at #5), since the detector 9 is in the back of the line. The primary radiation (fig. 2, from #1 and 2) impinges on a first line (figs. 2 and 5, #5) which is the last line (fig. 2, in the back of the detector array including #3 and #9 at #5) of the single radiation detector array (figs. 2 and 5, including #3 and #9 at #5) in the direction along which the object of interest (fig. 2, #4) is displaced (fig. 2, displaced via #11) with respect to the single radiation detector array (figs. 2 and 5, #3 and 5).



In conclusion, Applicant's arguments are not persuasive, and the claims remain rejected.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571)272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chih-Cheng Glen Kao/  
Primary Examiner, Art Unit 2882